



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

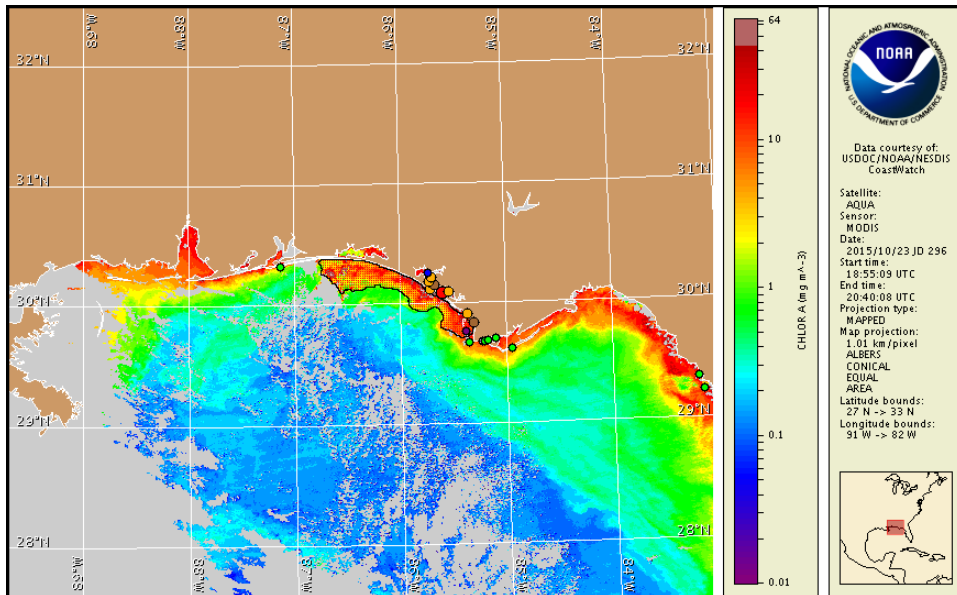
Monday, 26 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 22, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 16 to 23: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for along-shore northwest Florida Monday, October 26 to Thursday, October 29 is listed below:

County Region: Forecast (Duration)

Walton County: High (M-Th)

Bay County: Moderate (M-Th)

Bay County, bay regions: High (M-Th)

Gulf County: Very Low (M), Moderate (Tu-W), Low (Th)

Gulf County, west bay regions-St. Joseph Bay area: Low (M-W), Very Low (Th)

All Other NWFL County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation has been reported from Walton County.

Analysis

Recent samples collected over the past week alongshore northwest Florida from Escambia to Taylor counties continue to identify background to 'high' *Karenia brevis* concentrations alongshore Bay to Gulf counties, with the highest concentrations identified in East Bay in Bay County (FWRI; 10/19-22). Samples collected in the bay regions of Bay County on 10/22 show increasing concentrations of *K. brevis*, with the highest concentrations observed southeast of Dupont Bridge (FWRI). Concentrations have increased from medium' to 'high' in East Bay and from 'low a' to 'medium' in West Bay, with 'very low a' concentrations collected as far north as Cedar Hammock (FWRI; 10/22). Citizen reports of respiratory irritation have been received from Grayton and Seaside beaches in Walton County (10/24). No other respiratory irritation reports from surrounding counties have been received (MML; 10/22-26). Continued fish kills were reported from St. Joseph's Bay in Gulf County and St. Andrew's Bay in Bay County last week (FWRI; 10/23). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

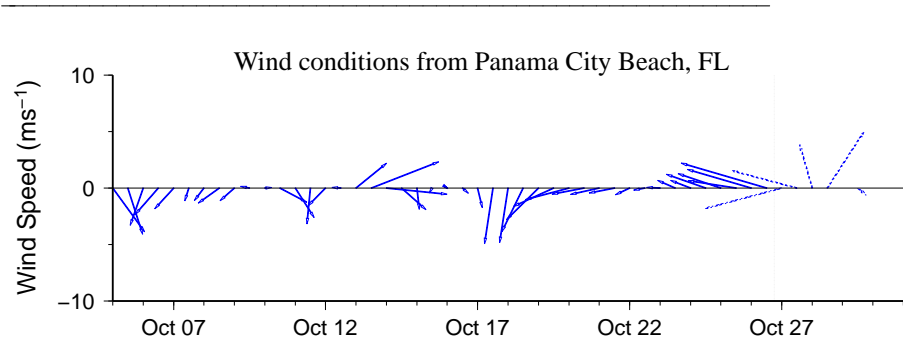
In recent ensemble imagery (MODIS Aqua, 10/23), a feature of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* is visible along- and offshore northwest Florida from Okaloosa to Gulf counties, extending up to 23 miles offshore Okaloosa County and 16 miles offshore Bay County.

Winds forecasted alongshore northwest Florida today through Tuesday may promote onshore transport of any offshore surface *K. brevis* concentrations.

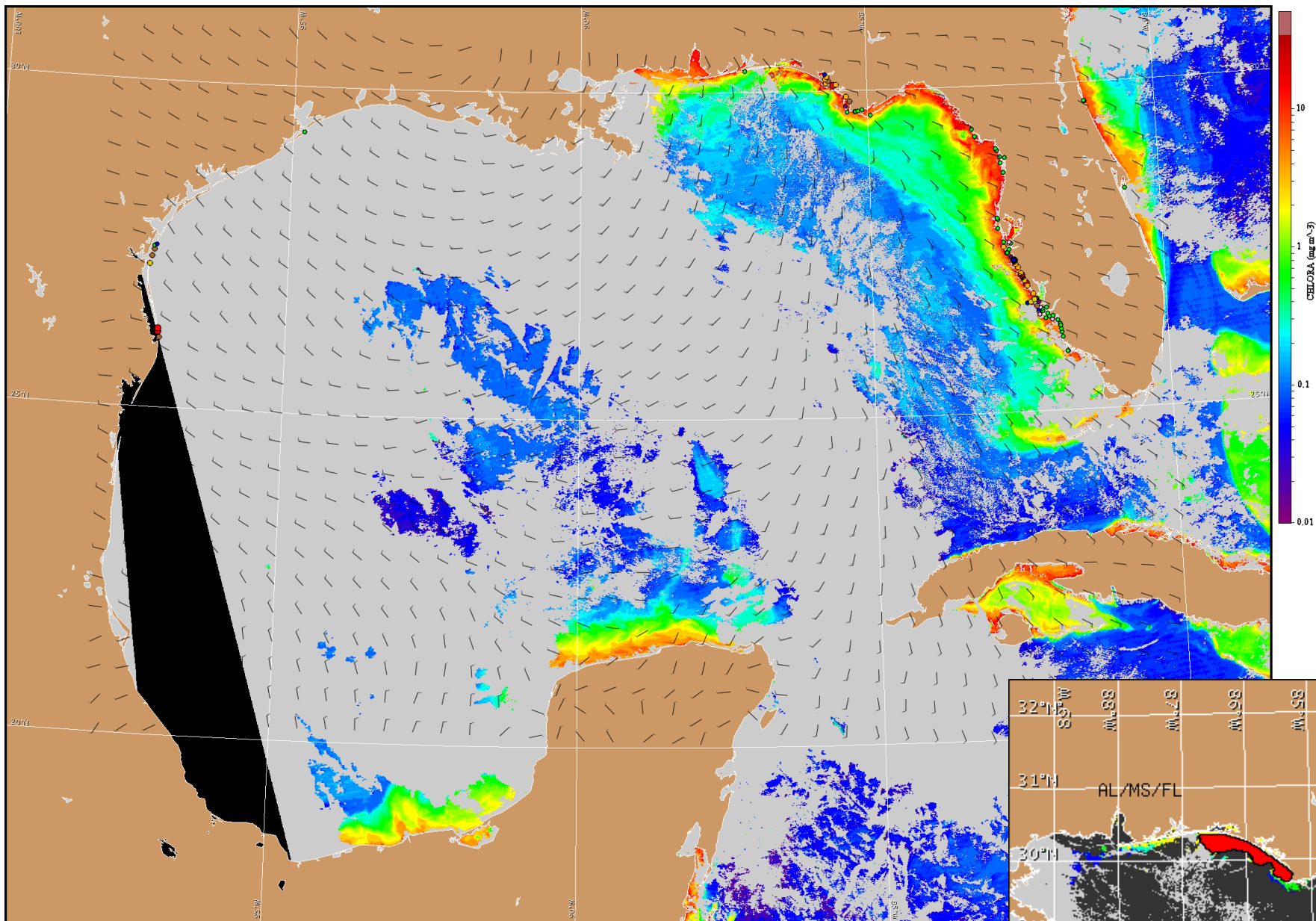
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Wind Analysis

Escambia to Taylor counties: Southeast winds (25-30kn, 13-15m/s) today and tonight, with gusts up to 40kn (20m/s). South winds (10-20kn, 5-10m/s) Tuesday. Southwest winds (10-15kn, 5-8m/s) Tuesday night. West winds (10kn, 5m/s) Wednesday. Northwest winds (5-10kn, 3-5m/s) Wednesday night and Thursday.

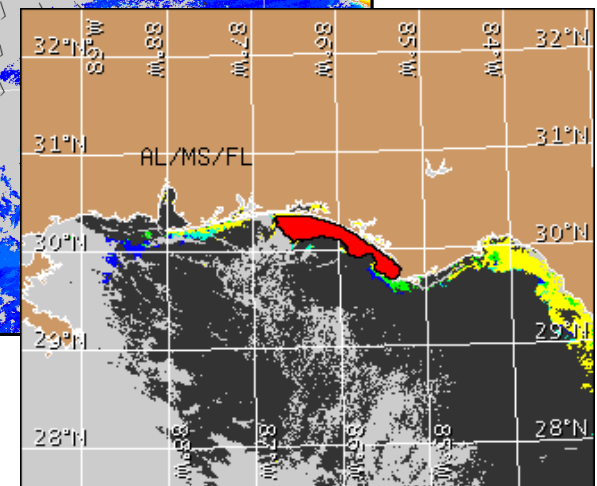


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for October 27, 2015 12Z with points representing cell concentration sampling data from October 16 to 23: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).